

### Rates of Change

Time $t$ (min)	0	36	72	108	144
Temperature $F(t)$ ( $^{\circ}\text{F}$ )	40	45	60	92	120

A 24-pound, unstuffed turkey is placed into an oven set to  $325^{\circ}\text{F}$ . The temperature of the turkey is collected every 36 minutes from the time the turkey was put in the oven. The function  $F$  is increasing and twice differentiable.

Estimate  $F'(70)$ . Show the work that leads to your answer. Indicate units of measure. Write a sentence detailing what this value means in context with the problem.